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ABSTRACT

The purpose of this report is to provide California community colleges with a statistical description of regional employment trends between 1991 and 1997. These trends are presented by one-, two-, and three-digit Standard Industrial Classification Codes (SIC) for each of the nine regions of the state: (1) the Bay Area; (2) the Central Coast; (3) the Central Sierra; (4) Northern California; (5) Northern Sacramento Valley; (6) Greater Sacramento; (7) San Diego; (8) San Joaquin Valley; and (9) Southern California. Each chapter contains an overview of employment gains and losses in the region, employment gains and losses by major industrial group, and detailed data on the manufacturing and services sectors, and discusses candidates for additional analysis. The data provide a guide for regional and state decisionmakers as they formulate workforce development policy for the coming year. Report highlights include: (1) the services sector was responsible for 69 percent of the total job growth in the Bay Area, 81 percent in Southern California, and 41 percent in the Central Sierra region; (2) retail trade ranked second to services in Northern California, with 2,763 new jobs; and (3) agriculture ranked second to services in the Central Coast region, with 7,742 new jobs. Contains numerous graphs and figures. (JA)

NEW

CALIFORNIA'S

REGIONAL

EMPLOYMENT

TRENDS

1991-1997



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In order to achieve sustainable economic growth, meet the demands of global competition in the modern economy, and improve the quality of life for all Californians, California shall have a comprehensive workforce development system of education and workforce preparation linked to economic development that sets the standard for the nation and the world.

Assembly Bill 680, Chapter 1000, Statutes of California, 1999



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Other members of our Executive Committee who have helped us put this project on track and keep it there even on short timelines, have been Bruce Grogan, Deputy Secretary for Economic Development of the California Trade and Commerce Agency, Robert Hotchkiss, Deputy Director of the Health and Human Services Agency, and Dr. Patrick Ainsworth, Assistant Superintendent of Standards, High School Division.

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Introduction and Economic Base Analysis

"First, every industry emphasized that skill-sets improvement through education and workforce training is its top priority. Job opportunities and changing skill-sets need to drive job training programs."

*Collaborating to Compete in the New Economy.
Economic Strategy Panel of the California Trade and
Commerce Agency, 1996.*

Introduction

Directions of the New Economy is sponsored by the Economic Development Program of the California Community Colleges. It is designed to follow the thinking of the Economic Strategy Panel of the California Trade and Commerce Agency. Planning for investment in regional workforce and economic development efforts is an activity that involves many entities and organizations. Several agencies collaborate with the Community Colleges in direction setting for program planning, among them the California Trade and Commerce Agency, the Health and Human Services Agency, and the Department of Education. In planning for the best use of economic development resources in the State, these four agencies are committed to working within a policy framework as collaborators.

The mission of the Economic Development Program is to advance California's economic growth and global competitiveness through quality education and services focusing on continuous work force improvement, technology deployment, and business development. The Economic Development Program provides job-related education and services to businesses and organizations of all sizes, in both public and private sectors. The Program is also responsible for developing innovative solutions in identified strategic priority industries that are developing jobs for which technical training curricula are needed by the Colleges. Technical training programs have substantial start-up time and resource needs; colleges are thus advantaged by anticipating future needs for our programs in economic and workforce development.

The Purpose of this report is to provide Community Colleges in each region of the State with a statistical description of regional employment trends between 1991 and 1997. These trends are presented by one, two and three digit Standard Industrial Classification Codes (SIC) for each of the nine regions of the State. Comparable data for all industries for each of the counties in the State can be accessed at <http://commerce.ca.gov/california/economy/index.html>

This document was produced to provide staff, faculty and administrators with a concise handbook to help them understand the economic base in their region, and how employment trends are undergoing change. The work was designed as an accompaniment to a general call for proposals of new strategic priority areas. This call is disseminated widely throughout the community colleges and our network of collaborating organizations. Considering the support of new strategic priorities helps keep the Economic Development Program on the cutting edge of innovation and allows strategic decision-making about the content of the Economic Development "portfolio" of programs.

The document was also designed to be of assistance not only to ourselves, but also to our partners in the Department of Education, the California Trade and Commerce Agency, and the Health and Human Services Agency. We believe that secondary and post-secondary education is the key to workforce development. Without the solid foundation of secondary and post-secondary education, the economy will not thrive in the future. Likewise, we are solid partners with the California Trade and Commerce Agency, with whom we share an interest in creating jobs and increasing California's economic growth. And, we work as partners with the Health and Human Services Agency to craft and implement solutions to workforce issues for providing opportunities to people. It is our hope that by packaging this information in a regional approach, with an emphasis on helping service providers understand the regional economies in California, that our document can be of service and assistance to our partners in these critical agencies, as well as to ourselves.

Methodology

The data presented in this report identifies the source of employment growth in the State for the top employment generators in each of its nine economic regions as defined by the Labor Market Information Division of the Employment Development Department and utilized by the Economic Strategy Panel of the California Trade and Commerce Agency.

This work can only be done on a regional basis; the State of California is too large, and too diverse, to be considered as a single unit economically. Thus, the report in this handbook examines the regions of California. For purposes of studying the economy, the nine economic regions as defined by the Economic Strategy Panel have been used in this report. These regions are defined by the clusters of buyers and sellers that network together in a region to produce goods and services. Together they form an industrial infrastructure that defines the nature of work in a region. (The California Community Colleges have also defined regions in California as a means to collaborate with each other and with other providers of educational services. The ten Community College regions are defined differently than the economic regions used in this report.)

Introduction and Economic Base Analysis

By separating job losses from job gains the data included in each of the nine reports disclose actual job gains rather than the net after calculating job gains and job losses. Therefore, these data provide a better guide for regional and state decision-makers as they formulate workforce development policy for the coming year. The data in this report are presented at the level of detail available from the ES 202 files maintained by the Labor Market Information Division of the Employment Development Department. It is illustrative of employment trends and is not necessarily accurate to the level of detail presented.

Descriptions of the economic base for each of the State's nine economic regions are provided in separate chapters. Each chapter contains an overview of employment gains and losses in the region, employment gains and losses by major industrial group, detailed data on the manufacturing and services sectors and discusses candidates for additional analysis.

A process for refining the data in this report and developing workforce development policies is provided. Community Colleges are encouraged to work collaboratively with other organizations and representatives of key business clusters in their region to develop regional workforce investment strategies. It is further recommended that these strategies be reviewed annually based on up-dated employment data.

Our thanks go to our colleagues at the California Trade and Commerce Agency and the Labor Market Information Division of the Employment Development Department for their willingness to share their time and expertise with us.

For more information:

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www.ednet.cc.ca.us

Economic Base Analysis

How Economies Grow

Employment growth is a function of both local and external trends. Industries such as retail trade and some firms in all sectors depend on increases in local demand to support their growth. Even some firms in the manufacturing sector serve primarily local customers. These are called local serving businesses and they can only grow if there is a growth in the income in the regions and/or a growth in population, which brings with it additional wealth and expands the labor force.

In contrast some firms sell most of their goods and services outside the region. These firms are called export businesses whether they sell their goods in the adjoining regions or throughout the world. Export businesses can be found in all sectors of the region's economic base and are highly sensitive to external changes in the regional, state, national or global economy. Moreover they are not sensitive to income and/or population growth in the region.

The distinction is important because local serving businesses do not bring additional wealth into the region. Only export businesses bring in new wealth and therefore receive the most attention in business attraction and expansion programs because of their wealth-creating potential. In some cases, however, primarily local serving businesses such as eating and drinking places and lodging bring new wealth into the region because of consumers from outside the region purchasing their services. Some businesses in the medical services, education and transportation industries, as well as others play a similar dual role.

Another consideration is the ecological and evolutionary nature of economic growth. Economic growth is ecological in that all businesses are in networks of firms called clusters. They are tied together as buyers and sellers of products and services essential for producing a final product for consumers. They are also tied together regarding markets and the physical infrastructure that supports the cluster. These networks can be entirely local or have no local connections at all. However, most clusters have strong regional networks and this is why the region is the best geographic unit for analysis.

Clusters of firms are evolutionary in that most new clusters emerge out of the clusters that are already well developed in the region. Firms locate in a region to take advantage of the network of buyers and suppliers, markets and physical infrastructure already in place to serve existing clusters. As they grow and mature they find new markets in other clusters and in some cases develop into an entirely new cluster of networked firms.

Since the availability and quality of the labor force is increasingly important in a firm's decision on where to locate or expand, detailed knowledge of the mix is vital for regional decision-makers to know how the mix is changing over time. This is especially important since the changes in the mix of industries in a region's economic base are increasingly rapid.

It is no longer sufficient to benchmark a local economic base every five or ten years. And it is misleading to analyze changes in the business mix at the one digit SIC Code level. It is also misleading to look only at the net employment growth rather than the absolute gains and losses in each industrial sector. Without this level of detail opportunities as well as problems will be overlooked.

Bay Area Region



Overview of Employment Gains and Losses

Figure 1 provides an overview of employment growth in the Bay Area between 1991 and 1997. Job gains by division show that the services sector was responsible for 206,332 new jobs in the Bay Area during this period accounting for 69 percent of the total job growth. Services sector businesses grew at an annual rate of 3.7 percent compared to 3.0 percent for the State.

Job gains in retail trade ranked second with 27,610 new jobs followed by manufacturing which added 21,791 new positions. Other significant job gains were found in wholesale trade (7,771) and agriculture (6,004). Only two sectors suffered losses, finance, insurance and real estate (FIRE), (-8,655) and mining (-2,873). Both industries were following State wide trends, but the losses in FIRE were less than that for the State as a whole. (See the Tables, which accompany this publication, for more details.)

Employment Gains and Losses by Major Sector

The figures in this section add more detail to the data previously presented for the top employment generators in the Bay Area region at the two digit SIC Code level. These figures illustrate the importance of disaggregation of employment data for gaining an accurate picture of regional job growth. (See Tables)

Manufacturing

Figure 2 shows job gains at the two digit SIC Code level for Manufacturing. Note that separating job gains from job losses shows that the Bay Area gained 44,254 new manufacturing jobs between 1991 and 1997 rather than the 21,791 net new manufacturing jobs shown in **Figure 1**. This under counting of job gains results from computation of the data to show only the net (gains minus losses) at the one digit SIC Code level.

Figure 2 also shows that most of the employment gains during this period were accounted for by two major groups in the manufacturing division, electronic and other electronic equipment with 18,126 new jobs and industrial machinery and equipment with job gains of 12,734. Other contributors to job gains in manufacturing were, instruments and related products (5,046) and fabricated metal products (2,933).

Services

Figure 3 shows similar data for the services division. Total job gains in this sector were 210,032 as opposed to the 206,332 reported in **Figure 1** for the industry division level. In contrast to manufacturing job losses, services had far less losses compared to gains resulting in a less inaccurate number for net job gains.

This figure shows that 126,138 of the job gains were accounted for by one major group of the services sector, business services. Business services provided 60 percent of the job gains in the region. This increase was 8.4 percent annually compared to 6.9 percent for the State.

Business services was followed by engineering & management services at 20,782 new jobs, health services with 16,597 and amusement and recreation services with 11,014 new jobs. Other major groups in the services sector contributing significantly were private households (5,778), auto repair, services and parking (5,152) educational services (3,791) and motion pictures (3,517).

Candidates for Further Analysis

Further disaggregation of the data to the industry group level is shown in the following figures. This final step in the disaggregation process identifies the top employment gainers among the larger and smaller firms in the Bay Area region. **Figure 4** shows the top six industry groups that had an employment base of over 10,000 in 1997, grew in employment 10% or more and added at least 1,000 jobs. (See Tables)

Computer and data processing services led the way by adding 67,378 new jobs to the region between 1991 and 1997. Second was personnel supply services with 43,509 new jobs during this period. A distant third was electronic components and accessories with 15,035 new jobs and air transportation came in fourth with 11,859 new jobs. Management and public relations was fifth (11,010) and Misc. amusement, recreation services was fifth (10,506).

The top ten industries with 1997 employment of less than 10,000, employment growth of 10 percent or more who added at least 1,000 jobs are shown in **Figure 5**. The leader in this category was social services, which added 3,171 new jobs between 1991 and 1997. This represented a 7.5 percent annual growth rate well above that of the State, which was 4.4 percent.

Other sectors in the top ten were home health care services adding 2,809 new jobs, cable and other pay TV services adding 2,787, security and commodity services with 2,641, advertising with 2,591, metal forging and stampings 2,489, automotive services, except repair 2,454 and schools and educational services 2,472. Security and commodity exchanges was tenth with 1,985 new jobs during the period.

Figure 4 Large Industrial, Top 6

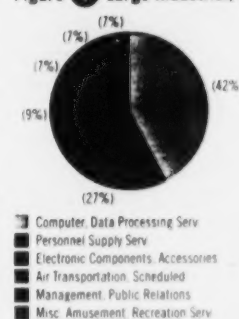


Figure 5 Small Industrial, Top 10

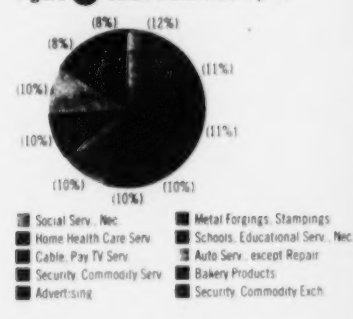




Figure 1 Absolute Change in Bay Area Employment, 1991 to 1997

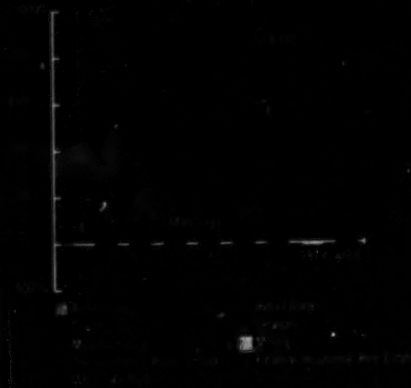


Figure 2 Absolute Change in Bay Area Manufacturing Employment, 1991 to 1997

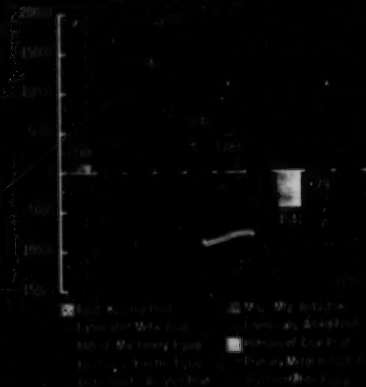
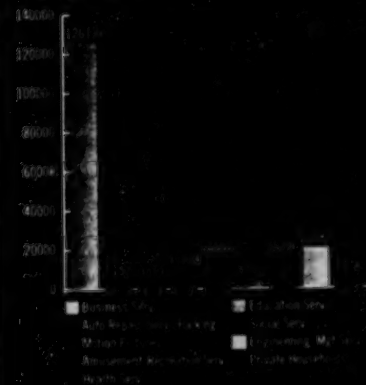


Figure 3 Absolute Change in Bay Area Services Employment, 1991 to 1997



Central Coast Region



Overview of Employment Gains and Losses

Figure 1 provides an overview of employment growth in the Central Coast between 1991 and 1997 for all industry divisions. Net employment growth in the region was 16,936. However, job gains amounted to 23,677 but were offset by job losses of 6,741. Hence, the actual job gain was forty percent more than the most commonly used figure.

Job gains in the services division were responsible for 10,537 new jobs in the Central Coast during this period accounting for 45 percent of the total job growth in the region. Services division businesses grew at an annual rate of 1.8 percent compared to 3 percent for the State.

Job gains in agriculture ranked second with 7,742 new jobs followed by retail trade which added 4,832 new positions. Modest job gains were found in construction (378) and transportation and public utilities (140). Three sectors suffered losses, manufacturing (-3,967), finance, insurance and real estate (FIRE), (-2,068) and mining (-706). All three industries were following State wide trends, but the losses were larger than that for the State as a whole. (See the Tables, which accompany this publication, for more details.)

Employment Gains and Losses by Major Sector

Figures in this section add more detail to the data previously presented for the top employment generators in the Central Coast region at the major industry group level. These figures illustrate the importance of disaggregation of employment data for gaining an accurate picture of regional job growth. (See Tables)

Manufacturing

Figure 2 shows job gains at the major industry group level for manufacturing. Note that separating job gains from job losses shows that the Central Coast gained 3,183 new manufacturing jobs between 1991 and 1997 rather than losing 3,966 net jobs shown in Figure 1. This under counting of job gains results from computation of the data to show only the net (gains minus losses) at the one digit SIC Code level.

Figure 2 also shows that most of the employment gains during this period were accounted for by nine industrial groups in the manufacturing sector. Chemicals and allied products added 786 new jobs, food and kindred products added 640, rubber and misc. plastic products added 456, printing and publishing added 426 and fabricated metal products added 391. Other contributors to job gains in manufacturing were, lumber and wood products (182) and paper and allied products (167).

Services

Figure 3 shows similar data for the services division at the major group level. Total job gains in this sector were 12,729 as opposed to the 10,537 reported in Figure 1 for the one digit SIC Code level. Therefore, actual job gains in services were 20 percent higher than the figure most

often used. As in manufacturing, job gains were spread out over four major groups with additional job gains in eight additional groups at this level.

Figure 3 shows that 5,210 of the job gains were accounted for by one major group in the services sector, business services. Business services provided 41 percent of the job gains in the services sector. This increase was 5.1 percent annually compared to 6.9 percent for the State.

Business services was followed by health services with 1,931 jobs, amusement and recreation services with 1,256 new jobs and social services with 1,225. Other components of the services sector contributing significantly were hotel and other lodging places (755), private households (729) educational services (559) and membership organizations (414).

Candidates for Further Analysis

Further disaggregation of the data to the industry group level is shown in the following Figures. This final step in the disaggregation process identifies the top employment gainers among the larger and smaller firms in the Central Coast region. Figure 4 shows the top six industries that had an employment base of over 1,000 in 1997, grew in employment 10% or more and added at least 100 jobs. (See Tables)

Personnel supply services led the way by adding 4,277 new jobs to the region between 1991 and 1997. Second were farm labor and management services with 2,993 new jobs during this period. A distant third was management and public relations with 1,319 new jobs. Misc. amusement, recreation services was fifth with 1,084 new jobs and air transportation came in fifth (1,042). Misc. business services were sixth (884).

The top ten industry groups with 1997 employment of less than 1,000, employment growth of 10 percent or more who added at least 100 jobs are shown in Figure 5. The leader in this category was personal credit institutions, which added 697 new jobs between 1991 and 1997. This represented a 27.2 percent annual growth rate well above that of the State, which was negative 0.5 percent.

Other sectors in the top five were airports, flying fields & services adding 537 new jobs, special industry machinery adding 520, botanical and zoological gardens with 496, misc. durable goods with 402 and misc. publishing with 363.

Figure 4 Large Industrial, Top 6 Figure 5 Small Industrial, Top 10

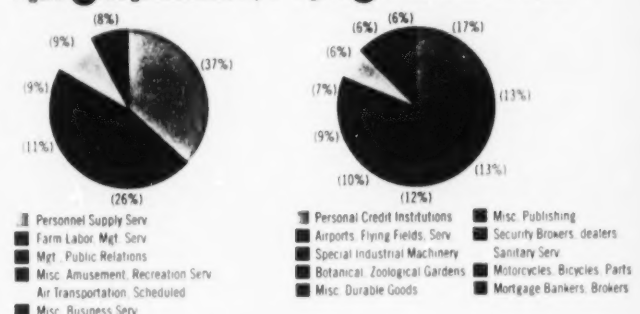




Figure 1 Absolute Change in Central Coast Employment, 1991 to 1997

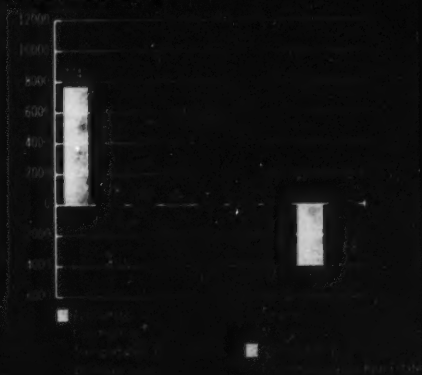


Figure 2 Absolute Change in Central Coast Manufacturing Employment, 1991 to 1997

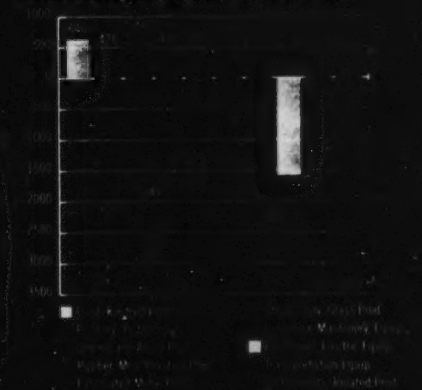
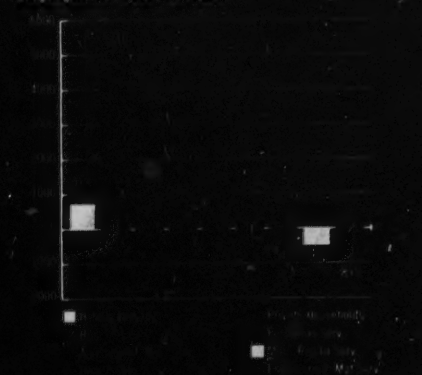


Figure 3 Absolute Change in Central Coast Services Employment, 1991 to 1997



Central Sierra Region



Overview of Employment Gains and Losses

Figure 1 provides an overview of employment growth in the Central Sierra economic region between 1991 and 1997. Job gains show that the services sector was responsible for 1,257 new jobs in the Central Sierra during this period accounting for 41 percent of the total job growth in the region. Services sector businesses grew at an annual rate of 1.6 percent compared to 3 percent for the State.

Job gains in retail trade ranked second with 943 new jobs followed by manufacturing which added 727 new positions. The only other job gains were found in agriculture (74). Five sectors suffered losses, finance, insurance and real estate (FIRE), (280), wholesale trade (1,176), transportation and public utilities (13), construction (639) and mining (539). These industries were declining more than statewide trends. (See the Tables, which accompany this publication, for more details.)

Employment Gains and Losses by Major Sector

The figures in this section add more detail to the data previously presented for the top employment generators in the Central Sierra region at the two digit SIC Code level. These figures illustrate the importance of disaggregation of employment data for gaining an accurate picture of regional job growth. (See Tables)

Manufacturing

Figure 2 shows job gains at the major group level for manufacturing. Note that separating job gains from job losses shows that the Central Sierra gained 1,086 new manufacturing jobs between 1991 and 1997 rather than the 727 net new jobs shown in **Figure 1**. This under counting of job gains results from computation of the data to show only the net (gains minus losses) at the one digit SIC Code level.

Figure 2 also shows that most of the employment gains during this period were accounted for by two industrial groups in the manufacturing sector, electronic and other electronic equipment with 210 new jobs and industrial machinery and equipment with job gains of 303. Other contributors to job gain in manufacturing were, chemicals and allied products (165) and rubber and miscellaneous plastic products (127).

Services

Figure 3 shows similar data for the services division. Total jobs gains in this division were 2,347 as opposed to the 1,257 reported in **Figure 1** for the one digit SIC Code level. In contrast to manufacturing job losses, services had far more employment losses compared to gains resulting in a more inaccurate number for net job gains.

This figure shows that 1,494 of the job gains were accounted for by one major group in the services sector, amusement and recreation services. Amusement and recreation services provided 64 percent of the job gains in the region in the services sector. This increase was 18.5 percent annually compared to 4.2 percent for the State. Amusement and recreation services was followed by social services at 259 new jobs, educational services with 149 and membership organizations with 148 new jobs.

Candidates for Further Analysis

Further disaggregation of the data to the three digit SIC code level is shown in the following figures. This final step in the disaggregation process identifies the top employment gainers among the larger and smaller firms in the Central Sierra region. **Figure 4** shows the top two three digit SIC Code industries that had an employment base of over 500 in 1997, grew in employment 10% or more and added at least 50 jobs. (See Tables)

Miscellaneous amusement, recreation services led the way by adding 1,466 new jobs to the region between 1991 and 1997. Second was real estate agents and managers with 131 new jobs during this period.

The top ten industries with 1997 employment of less than 500, employment growth of 10 percent or more who added at least 50 jobs are shown in **Figure 5**. The leader in this category was communications equipment, which added 233 new jobs between 1991 and 1997. This represented a 76.4 percent annual growth rate well above that of the State, which was 4.3 percent.

Other major groups in the top ten were beverages adding 196 new jobs, residential care adding 181, individual and family services with 171, local and suburban transportation with 130, miscellaneous plastics products, unclassified 127, miscellaneous chemical products 125 and schools and personnel supply services 110. Civic and social associations were tenth with 89 new jobs during the period.

Figure 4 Large Industrial, Top 2 **Figure 5** Small Industrial, Top 10

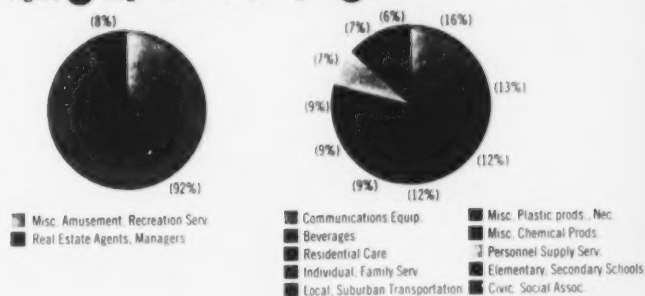


Figure 1 Absolute Change in Central Sierra Employment, 1991 to 1997

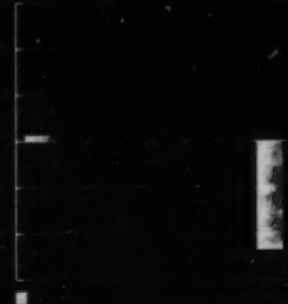


Figure 2 Absolute Change in Central Sierra Manufacturing Employment, 1991 to 1997

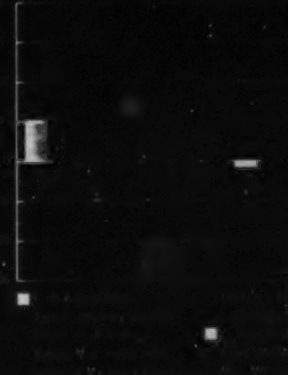
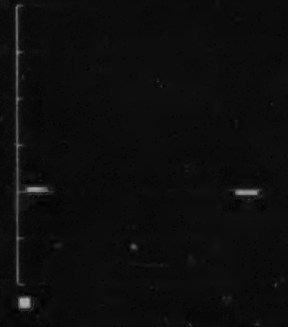


Figure 3 Absolute Change in Central Sierra Services Employment, 1991 to 1997



Northern California Region



Overview of Employment Gains and Losses

Figure 1 provides an overview of employment growth in the Northern California between 1991 and 1997. Job gains show that the services division was responsible for 7,948 new jobs in the Northern California during this period accounting for 60 percent of the total job growth in the region. Services division businesses grew at an annual rate of 3.8 percent compared to 3 percent for the State.

Job gains in retail trade ranked second with 2,763 new jobs followed by agriculture, which added 1,571 new positions. The other job gains were found in manufacturing (581), transportation and public utilities (4), and wholesale trade (335). Three sectors suffered losses, finance, insurance and real estate (FIRE) (-43), construction (-1,172) and mining (-164). Those industries showing losses tended to mirror the statewide trends. (See the Tables, which accompany this publication, for more details.)

Employment Gains and Losses by Major Sector

The figures in this section add more detail to the data previously presented for the top employment generators in the Northern California region at the major group level. These figures illustrate the importance of disaggregation of employment data for gaining an accurate picture of regional job growth. (See Tables)

Manufacturing

Figure 2 show job gains at the major group level for manufacturing. Note that separating job gains from job losses shows that the Northern California region gained 1,811 new manufacturing jobs between 1991 and 1997 rather than the 581 net new jobs shown in **Figure 1**. This under counting of job gains results from computation of the data to show only the net (gains minus losses) at the one digit SIC Code level.

Figure 2 also shows that most of the employment gains during this period were accounted for by two major groups in the manufacturing sector, industrial machinery and equipment with 609 new jobs and food and kindred products with job gains of 434. Other contributors to job gain in manufacturing were, fabricated metal products (287) and miscellaneous manufacturing industries (110).

Services

Figure 3 shows similar data for the services division. Total jobs gains in this division were 8,319 as opposed to the 7,948 reported in **Figure 1** for the division level. In contrast to manufacturing job losses, services had far fewer losses compared to gains resulting in a less inaccurate number of net job gains than for manufacturing.

This figure shows that 1,798 of the job gains were accounted for by one major group of the services division, amusement and recreation services. Amusement and recreation services provided 22 percent of the job gains in the region in the services division. This increase was 14.1 percent annually compared to 4.2 percent for the State. Amusement and recreation services was followed by health services at 1,716 new jobs, Social services with 1,569 and private households with 851 new jobs.

Candidates for Further Analysis

Further disaggregation of the data to the industry group level is shown in the following figures. This final step in the disaggregation process identifies the top employment gainers among the larger and smaller firms in the Northern California region. **Figure 4** shows the top six industry groups that had an employment base of over 1,000 in 1997, grew in employment 10% or more and added at least 100 jobs. (See Tables)

Miscellaneous amusement, recreation services led the way by adding 1,774 new jobs to the region between 1991 and 1997. Second was hospitals with 1,198 new jobs during this period.

The top ten industries with 1997 employment of less than 1,000, employment growth of 10 percent or more who added at least 100 jobs are shown in **Figure 5**. The leader in this industry group was general industrial machinery, which added 459 new jobs between 1991 and 1997. This represented a 57.6 percent annual growth rate, compared to that of the State, which was negative 1.1 percent.

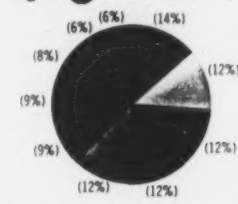
Other sectors in the top ten were forestry services adding 418 new jobs, industrial machinery, nec with 415, job training and related services with 407, trusts 387, beverages 373 and child day care services 325. Professional and commercial equipment was tenth with 298 new jobs during the period.

Figure 4 Large Industrial, Top 6



- Misc. Amusement, Recreation Serv
- Hospitals
- Private Households
- Landscape, Horticultural Serv
- Individual, Family Serv
- Beverages

Figure 5 Small Industrial, Top 10



- Gen. Industrial Machinery
- Forestry Serv
- Industrial Machinery, Nec
- Job Training, Related Serv
- Trusts
- Civic, Social Assoc.
- Prof., Commercial Equip
- Air Transportation, Scheduled
- Animal Serv., Except Veterinary
- Home Health Care Serv



Figure 1 Absolute Change in Northern California Employment, 1991 to 1997



Figure 2 Absolute Change in Northern California Manufacturing Employment, 1991 to 1997



Figure 3 Absolute Change in Northern California Services Employment, 1991 to 1997



Northern Sacramento Valley Region



Overview of Employment Gains and Losses

Figure 1 provides an overview of employment growth in the Northern Sacramento Valley between 1991 and 1997. Job gains show that the services division was responsible for 8,867 new jobs in the Northern Sacramento Valley during this period accounting for 76 percent of the total job growth in the region. Services division businesses grew at an annual rate of 4.1 percent compared to 3 percent for the State.

Job gains in retail trade ranked second with 1,475 new jobs followed by agriculture, which added 1,080 new positions. The other job gains were found in finance, insurance, and real estate (FIRE) (153), and manufacturing (81). Sectors that suffered losses were construction with a net loss of 1,574 wholesale trade (-258), mining (-192) and transportation and public utilities (-81). (See the Tables, which accompany this publication, for more details.)

Employment Gains and Losses by Major Group

The figures in this section add more detail to the data previously presented for the top employment generators in the Northern Sacramento Valley region at the two digit SIC Code level. These figures illustrate the importance of disaggregation of employment data for gaining an accurate picture of regional job growth. (See Tables)

Manufacturing

Figure 2 shows job gains at the major group level for manufacturing. Note that separating job gains from job losses shows that the Northern Sacramento Valley region gained 1,112 new manufacturing jobs between 1991 and 1997 rather than the 81 net new jobs shown in **Figure 1**. This under counting of job gains results from organization of the data to show only the net (gains minus losses) at the division level.

Figure 2 also shows that most of the employment gains during this period were accounted for by three major groups in the manufacturing sector, instruments and related products with 291 new jobs, industrial machinery and equipment with 263 new jobs and fabricated metal products with job gains of 218. Other contributors to job gain in manufacturing were, transportation equipment (155) and miscellaneous manufacturing industries (74).

Services

Figure 3 shows similar data for the services division. Total jobs gains in this division were 8,990 as opposed to the 8,867 reported in **Figure 1** for the division level. In contrast to manufacturing job losses, services had far less compared to gains resulting in a less inaccurate number of net job gains for manufacturing.

This figure shows that 2,930 of the job gains were accounted for by one major group in the services division, health services. Health services provided 33 percent of the job gains in the region in the services division. This increase was 3.5 percent annually compared to 1.4 percent for the State. Health services was followed by business services at 1,712 new jobs, amusement and recreation services with 915 and social services with 813 new jobs.

Candidates for Further Analysis

Further disaggregation of the data to the three digit SIC code level is shown in the following figures. This final step in the disaggregation process identifies the top employment gainers among the larger and smaller firms in the Northern Sacramento Valley region. **Figure 4** shows the top six three digit SIC Code industries that had an employment base of over 1,000 in 1997, grew in employment 10% or more and added at least 100 jobs. (See Tables)

Miscellaneous amusement, recreation services led the way by adding 891 new jobs to the region between 1991 and 1997. Second were hospitals with 890 new jobs during this period.

The top ten industries with 1997 employment of less than 1,000, employment growth of 10 percent or more who added at least 100 jobs are shown in **Figure 5**. The leader in this category was civic and social associations, which added 701 new jobs between 1991 and 1997. This represented a 24.2 percent annual growth rate, compared to that of the State, which was less than 1 percent.

Other industry groups in the top ten were computer and data processing services adding 486 new jobs, home health care services adding 422, business credit institutions with 358, miscellaneous fabricated textile products with 329, air transportation, scheduled 270, child day care services 239 and landscape and horticultural services 233. Water supply was tenth with 229 new jobs during the period.

Figure 4 Large Industrial, Top 6 **Figure 5 Small Industrial, Top 10**

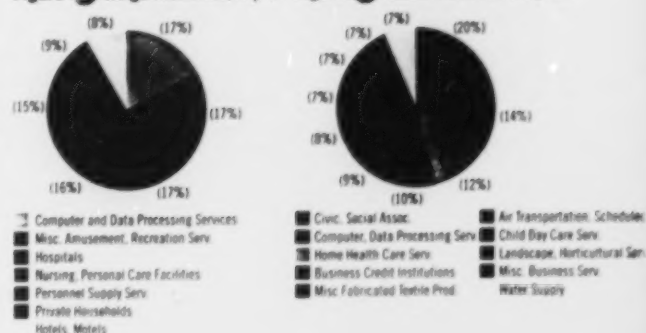


Figure 1 Absolute Change in Northern Sacramento Valley Employment, 1991 to 1997

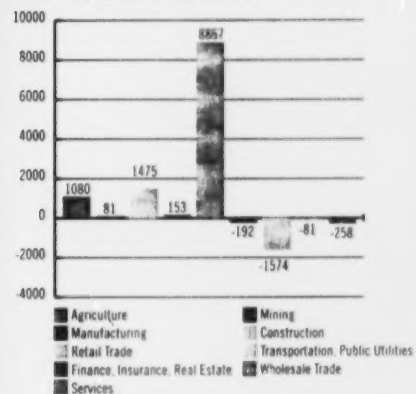


Figure 2 Absolute Change in Northern Sacramento Valley Manufacturing Employment, 1991 to 1997

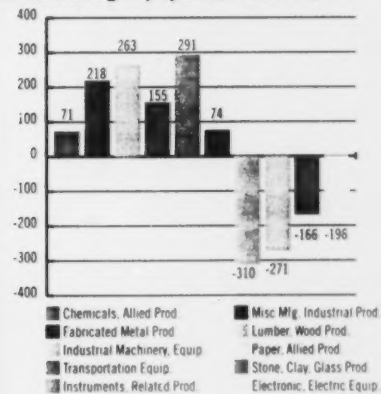
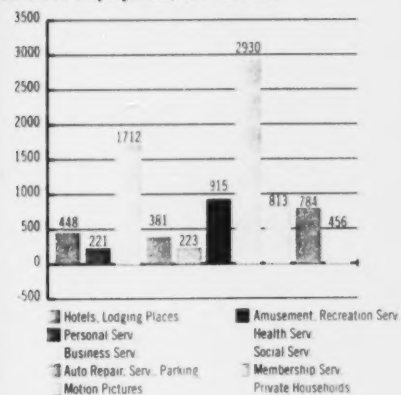


Figure 3 Absolute Change in Northern Sacramento Valley Services Employment, 1991 to 1997



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Greater Sacramento Region



Overview of Employment Gains and Losses

Figure 1 provides an overview of employment growth in the Greater Sacramento between 1991 and 1997. Job gains show that the services sector was responsible for 41,595 new jobs in the Greater Sacramento during this period accounting for 62 percent of the total job growth in the region. Services division businesses grew at an annual rate of 4.1 percent compared to 3 percent for the State.

Job gains in manufacturing ranked second with 8,698 new jobs followed by retail trade, which added 7,557 new positions. The other job gains were found in agriculture (1,944), construction (2,232), transportation and public utilities (2,921), wholesale trade (574) and finance, insurance and real estate (FIRE) (1,861). Only one sector suffered losses, mining with a net loss of 1,483, with a trend greater than the State. (See the Tables, which accompany this publication, for more details.)

Employment Gains and Losses by Major Sector

The figures in this section add more detail to the data previously presented for the top employment generators in the Greater Sacramento region at the major group level. These figures illustrate the importance of disaggregation of employment data for gaining an accurate picture of regional job growth. (See Tables)

Manufacturing

Figure 2 shows job gains at the major group level for manufacturing. Note that separating job gains from job losses shows that the Greater Sacramento region gained 11,761 new manufacturing jobs between 1991 and 1997 rather than the 8,698 net new jobs shown in **Figure 1**. This under counting of job gains results from computation of the data to show only the net (gains minus losses) at the division level.

Figure 2 also shows that most of the employment gains during this period were accounted for by two major groups in the manufacturing sector, electronic and other electronic equipment with 4,391 new jobs and industrial machinery and equipment with job gains of 4,924. Other contributors to job gains in manufacturing were, furniture and fixtures (913) and rubber and miscellaneous plastic products (537).

Services

Figure 3 shows similar data for the services division. Total jobs gains in this division were 43,419 as opposed to the 41,595 reported in **Figure 1** for the services division. In contrast to manufacturing job losses, services had far fewer losses compared to gains resulting in a less inaccurate number of net job gains for services.

This figure shows that 22,730 of the job gains were accounted for by

one component of the services division, business services. Business services provided 52 percent of the job gains in the region in the services division. This increase was 10.6 percent annually compared to 6.9 percent for the State. Business services was followed by social services at 4,454 new jobs, amusement and recreation services with 4,445 and health services with 3,675 new jobs.

Candidates for Further Analysis

Further disaggregation of the data to the industry group level is shown in the following figures. This final step in the disaggregation process identifies the top employment gainers among the larger and smaller firms in the Greater Sacramento region. **Figure 4** shows the top six three digit SIC Code industries that had an employment base of over 5,000 in 1997, grew in employment 10% or more and added at least 500 jobs. (See Tables)

Personnel supply services led the way by adding 12,359 new jobs to the region between 1991 and 1997. Second was miscellaneous business services with 5,142 new jobs during this period.

The top ten industries with 1997 employment of less than 5,000, employment growth of 10 percent or more who added at least 500 jobs are shown in **Figure 5**. The leader in this category was residential care, which added 2,109 new jobs between 1991 and 1997. This represented a 10.8 percent annual growth rate, compared to that of the State, which was 6.6 percent. (See Tables)

Other sectors in the top ten were electrical industrial apparatus adding 1,635 new jobs, services to buildings adding 1,435, air transportation, scheduled with 1,256, investment offices with 1,001, home health care services 988, miscellaneous durable goods 921 and farm labor and management services 897. Sugar and confectionery products were tenth with 880 new jobs during the period. (See Tables)

Figure 4 Large Industrial, Top 6

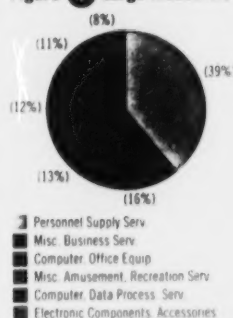


Figure 5 Small Industrial, Top 10

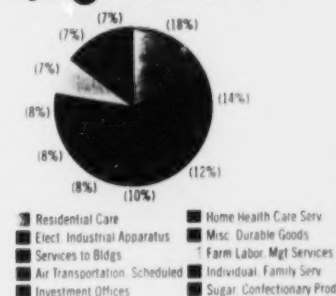


Figure Absolute Change in Greater Sacramento Employment, 1991 to 1997

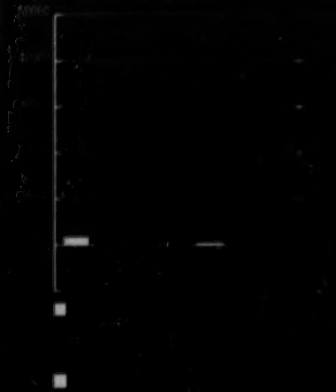


Figure Absolute Change in Greater Sacramento Manufacturing Employment, 1991 to 1997

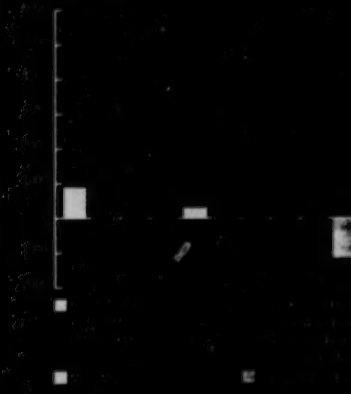
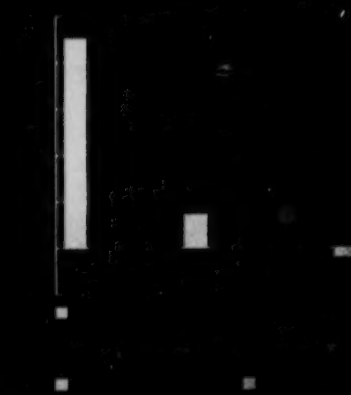


Figure Absolute Change in Greater Sacramento Services Employment, 1991 to 1997



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San Diego Region



Overview of Employment Gains and Losses

Figure 1 provides an overview of employment growth in the San Diego region between 1991 and 1997. Job gains show that the services division was responsible for 62,509 new jobs in the San Diego region during this period accounting for 67 percent of the total job growth in the region. Services division businesses grew at an annual rate of 3.4 percent compared to 3 percent for the State.

Job gains in retail trade ranked second with 14,467 new jobs followed by transportation and public utilities, which added 5,075 new positions. The other job gains were found in construction (4,172), agriculture (4,034), and wholesale trade (3,537). Divisions that suffered losses were manufacturing with a net loss of 9,481, finance, insurance, and real estate (FIRE) (-2,139), and mining (-872). (See the Tables, which accompany this publication, for more details.)

Employment Gains and Losses by Major Group

The figures in this section add more detail to the data previously presented for the top employment generators in the San Diego region at the division level. These figures illustrate the importance of disaggregation of employment data for gaining an accurate picture of regional job growth. (See Tables)

Manufacturing

Figure 2 shows job gains at the two digit SIC Code level for manufacturing. Note that separating job gains from job losses shows that the San Diego region gained 16,470 new manufacturing jobs between 1991 and 1997 rather than the 9,481 net loss shown in **Figure 1**. This under counting of job gains results from organization of the data to show only the net (gains minus losses) at the one digit SIC Code level.

Figure 2 also shows that most of the employment gains during this period were accounted for by two industrial components of the manufacturing division, miscellaneous manufacturing industries with 4,328 new jobs, and industrial machinery and equipment with job gains of 4,009. Other contributors to job gain in manufacturing were, apparel and other textile products (1,762) and electronic and other electric equipment (1,110).

Services

Figure 3 shows similar data for the services division. Total jobs gains in this division were 66,717 as opposed to the 62,509 reported in **Figure 1** for the division level. In contrast to manufacturing job losses, services had far less compared to gains resulting in a less inaccurate number of net job gains as seen in manufacturing.

This figure shows that 28,040 of the job gains were accounted for by one major group of the services division, business services. Business services provided 42 percent of the job gains in the region in the services division. This increase was 7.3 percent annually compared to 6.9 percent for the State. Business services was followed by engineering and management services at 12,513 new jobs, health services with 6,203 and social services with 4,456 new jobs.

Candidates for Further Analysis

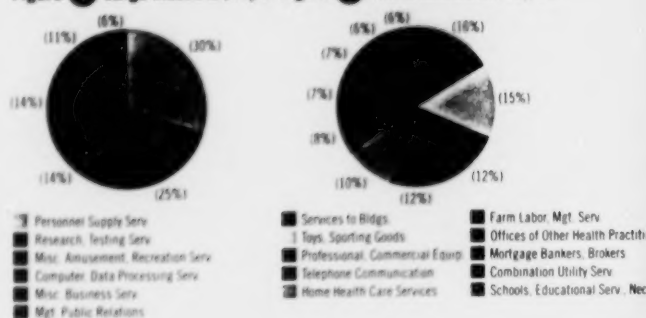
Further disaggregation of the data to the three digit SIC code level is shown in following figures. This final step in the disaggregation process identifies the top employment gainers among the larger and smaller firms in the San Diego region. **Figure 4** shows the top six three digit SIC Code industries that had an employment base of over 10,000 in 1997, grew in employment 10% or more and added at least 1,000 jobs. (See Tables)

Personnel supply services led the way by adding 12,178 new jobs to the region between 1991 and 1997. Second were research and testing services with 10,078 new jobs during this period.

The top ten industries with 1997 employment of less than 10,000, employment growth of 10 percent or more who added at least 1,000 jobs are shown in **Figure 5**. The leader in this category was services to buildings, which added 3,773 new jobs between 1991 and 1997. This represented a 9.9 percent annual growth rate, compared to that of the State, which was 3.1 percent.

Other major groups in the top ten were toys and sporting goods adding 3,497 new jobs, professional and commercial equipment adding 2,775, telephone communication with 2,734, home health care services with 2,302, farm labor and management services 1,872, offices of other health practitioners 1,729 and mortgage bankers and brokers 1,560. Schools and educational services, nec was tenth with 1,406 new jobs during the period.

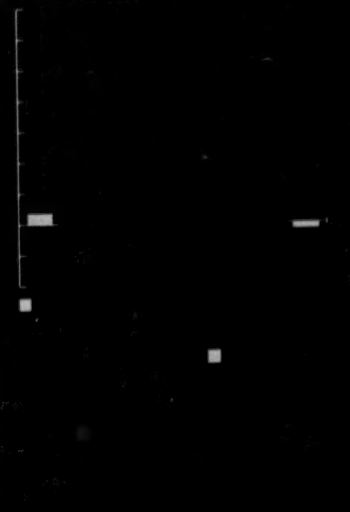
Figure 4 Large Industrial, Top 6 Figure 5 Small Industrial, Top 10





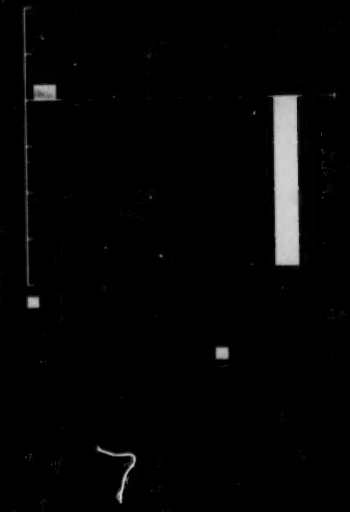
Figure

Absolute Change in San Diego Region
Employment, 1991 to 1997



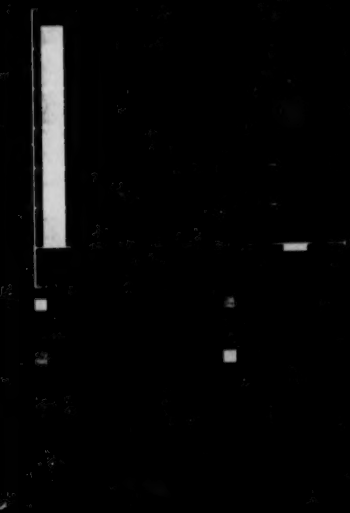
Figure

Absolute Change in San Diego Region
Manufacturing Employment, 1991 to 1997



Figure

Absolute Change in San Diego Region
Services Employment, 1991 to 1997



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San Joaquin Valley Region



Overview of Employment Gains and Losses

Figure 1 provides an overview of employment growth in the San Joaquin Valley between 1991 and 1997. Job gains show that the agriculture division was responsible for 44,734 new jobs in the San Joaquin Valley during this period accounting for 47 percent of the total job growth in the region.

Job gains in services ranked second with 33,072 new jobs followed by retail trade, which added 12,372 new positions. Services division businesses grew at an annual rate of 2.9 percent compared to 3 percent for the State. The only other job gains were found in transportation and public utilities with 4,066 new positions. Divisions that suffered losses were construction with a net loss of 5,772, mining (-3,633), finance, insurance, and real estate (FIRE) (-1,378), wholesale trade (-910), and manufacturing (-531). (See the Tables, which accompany this publication, for more details.)

Employment Gains and Losses by Major Group

The figures in this section add more detail to the data previously presented for the top employment generators in the San Joaquin Valley region at the major group level. These figures illustrate the importance of disaggregation of employment data for gaining an accurate picture of regional job growth. (See Tables)

Manufacturing

Figure 2 shows job gains at the two digit SIC Code level for manufacturing. Note that separating job gains from job losses shows that the San Joaquin Valley region gained 5,528 new manufacturing jobs between 1991 and 1997 rather than the 531 net loss shown in figure 1. This under counting of job gains results from computation of the data to show only the net (gains minus losses) at the one digit SIC Code level.

Figure 2 also shows that most of the employment gains during this period were accounted for by three major groups in the manufacturing division, industrial machinery and equipment with 1,390 new jobs, fabricated metal products 1,324 new jobs and rubber and misc. plastics products with job gains of 958. Other contributors to job gain in manufacturing were, instruments and related products (458) and miscellaneous manufacturing industries (415)

Services

Figure 3 shows similar data for the services division. Total jobs gains in this division were 35,055 as opposed to the 33,072 reported in **Figure 1** for the division. In contrast to manufacturing job losses, services had far fewer losses compared to gains resulting in a less inaccurate number of net job gains than for manufacturing.

This figure shows that 12,605 of the job gains were accounted for by one major group in the services division, business services. Business services provided 36 percent of the job gains in the region in the services division. This increase was 6.9 percent annually compared to 6.9 percent for the State. Business services was followed by health services at 8,281 new jobs, amusement and recreation services with 3,513, and social services with 3,180.

Candidates for Further Analysis

Further disaggregation of the data to the three digit SIC code level is shown in following figures. This final step in the disaggregation process identifies the top employment gainers among the larger and smaller firms in the San Joaquin Valley region. **Figure 4** shows the top six industry groups that had an employment base of over 5,000 in 1997, grew in employment 10% or more and added at least 500 jobs. (See Tables)

Farm labor and management services led the way by adding 29,943 new jobs to the region between 1991 and 1997. Second were personnel supply services with 7,742 new jobs during this period.

The top ten industries with 1997 employment of less than 5,000, employment growth of 10 percent or more who added at least 500 jobs are shown in **Figure 5**. The leader in this industry group was public warehousing and storage, which added 2,045 new jobs between 1991 and 1997. This represented a 13.9 percent annual growth rate, compared to that of the State, which was 5.7 percent. (See Tables)

Other divisions in the top ten were management and public relations adding 1,533 new jobs, crude petroleum and natural gas adding 1,413, fish hatcheries and preserves with 1,172, computer and data processing services with 1,084, Miscellaneous food and kindred products 942, health and allied services, nec. 860 and colleges and universities 834. Landscape and horticultural services were tenth with 789 new jobs during the period.

Figure 4 Large Industrial, Top 6 **Figure 5 Small Industrial, Top 10**

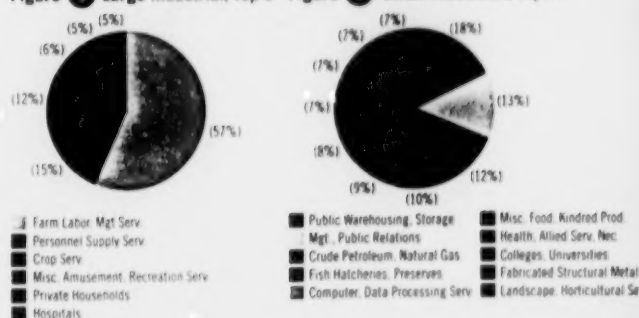


Figure 1 Absolute Change in San Joaquin Valley Employment, 1991 to 1997

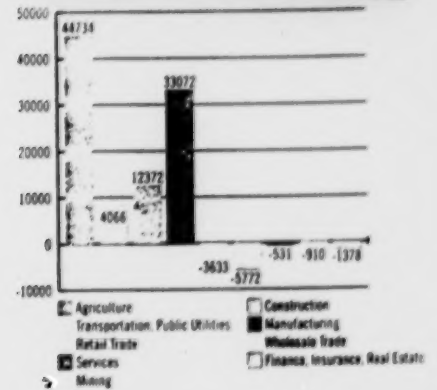


Figure 2 Absolute Change in San Joaquin Valley Manufacturing Employment, 1991 to 1997

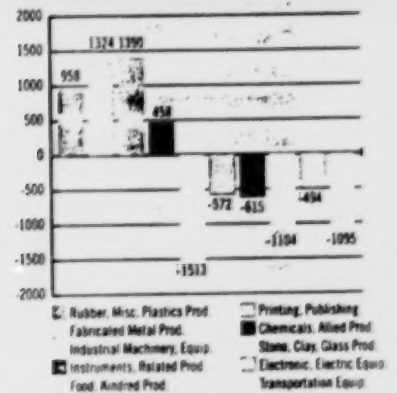
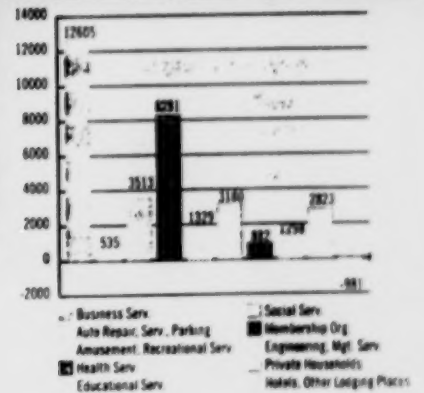


Figure 3 Absolute Change in San Joaquin Valley Services Employment, 1991 to 1997



Southern California Region



Overview of Employment Gains and Losses

Figure 1 provides an overview of employment growth in the Southern California region between 1991 and 1997. Job gains show that the services division was responsible for 229,420 new jobs in the Southern California region during this period accounting for 81 percent of the total job growth in the region. Services division businesses grew at an annual rate of 2.2 percent compared to 3 percent for the State.

Employment gains in retail trade ranked second with 21,472 new jobs followed by transportation and public utilities, which added 16,897 new positions. The other job gains were found in wholesale trade (13,174), and agriculture (751). Divisions that suffered losses were manufacturing with a net loss of 131,023, finance, insurance, and real estate (FIRE) (-55,942), mining (-16,800) and construction (-9,511). (See the Tables, which accompany this publication, for more details.)

Employment Gains and Losses by Major Group

The figures in this section add more detail to the data previously presented for the top employment generators in the Southern California region at industry group level. These figures illustrate the importance of disaggregation of employment data for gaining an accurate picture of regional job growth. (See Tables)

Manufacturing

Figure 2 shows job gains at the major group level for manufacturing. Note that separating job gains from job losses shows that the Southern California region gained 32,127 new manufacturing jobs between 1991 and 1997 rather than the -131,023 net loss shown in **Figure 1**. This under counting of job gains results from computation of the data to show only the net (gains minus losses) at the major group level.

Figure 2 also shows that most of the employment gains during this period were accounted for by two major groups in the manufacturing division, apparel and other textile products with 13,581 new jobs, and textile mill products with job gains of 7,329. Other contributors to job gain in manufacturing were, furniture and fixtures (3,584) and miscellaneous manufacturing industries (2,870).

Services

Figure 3 shows similar data for the services division. Total jobs gains in this division were 260,416 as opposed to the 229,420 reported in **Figure 1** for the division level. In contrast to manufacturing job losses, services had far fewer losses compared to gains resulting in a less inaccurate number of net job gains than in manufacturing.

This figure shows that 122,690 of the job gains were accounted for by one major group of the services division, business services. Business services provided 47 percent of the job gains in the region in the services division. This increase was 5 percent annually compared to 6.9 percent for the State. Business services was followed by motion pictures at 50,386 new jobs, health services with 25,309 and social services with 17,705 new jobs.

Candidates for Further Analysis

Further disaggregation of the data to the industry group level is shown in following figures. This final step in the disaggregation process identifies the top employment gainers among the larger and smaller firms in the Southern California region. **Figure 4** shows the top six three digit SIC Code industries that had an employment base of over 10,000 in 1997, grew in employment 10% or more and added at least 1,000 jobs. (See Tables)

Personnel supply services led the way by adding 64,635 new jobs to the region between 1991 and 1997. Second were motion picture production and services with 47,522 new jobs during this period. The top ten industries with 1997 employment of less than 10,000, employment growth of 10 percent or more who added at least 1,000 jobs are shown in **Figure 5**. The leader in this category was textile finishing, except wool, which added 3,569 new jobs between 1991 and 1997. This represented a 20 percent annual growth rate, compared to that of the State, which was 19.8 percent.

Other industry groups in the top ten were knitting mills adding 3,081 new jobs, men's and boys' furnishings adding 2,335, security and commodity services with 2,179, video tape rental with 2,142, museums and art galleries 1,938, special industry machinery 1,881 and automobile parking 1,827. Air transportation, nonscheduled was tenth with 1,416 new jobs during the period.

Figure 4 Large Industrial, Top 6

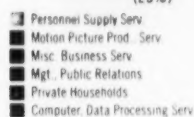


Figure 5 Small Industrial, Top 10

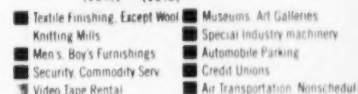
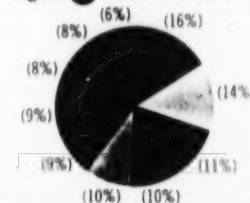


Figure 1 Absolute Change in Southern California Employment, 1991 to 1997



Figure 2 Absolute Change in Southern California Manufacturing Employment, 1991 to 1997

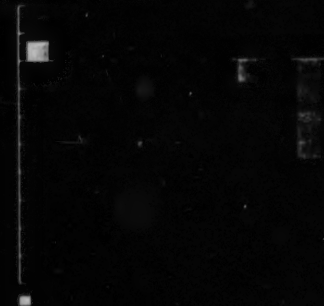
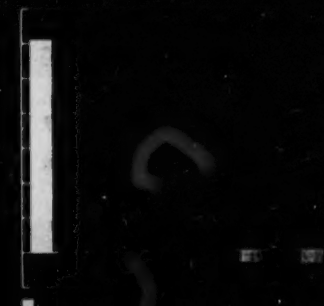


Figure 3 Absolute Change in Southern California Services Employment, 1991 to 1997



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Recommendations for Community Colleges

The data presented in Figures 4 and 5 throughout the regional chapters provide the basis for additional analysis. It is recommended that Community College decision-makers form a working group for the region made up of economic development, workforce development, training and education professionals, and Councils of Government to review the data and tentatively select no more than five large and two small industries for further study.

Once the tentative selection is made, it is recommended that the working group meet individually with representatives of regional businesses that are in the selected clusters. The purpose of these meetings is to determine, from those with first hand knowledge, the current trends in the industry in the region. If they appear to be positive, a final selection can be made. If not, other industries should be considered.

At this point a regional working group for each selected industrial sector should be formed. Each group should be made up of representatives of the economic development, workforce development and training, education professionals, and Councils of Government expanded to include representatives from a mix of regional businesses in the industrial sectors selected.

Once the industry working groups have been formed, data should be gathered and organized to project the employment growth of the industry, identify the occupational categories that will be required to match the projected employment growth, and list the skill requirements appropriate for the employment categories. This information is readily available online from State and Federal government sources.

<http://www.onetcenter.org/>

<http://www.calmis.cahwnet.gov/htmlfile/ccois/oor.htm>

The industry working group should discuss this information and come to conclusions regarding the nature and extent of training that should be undertaken in the coming year and the next five years. An implementation plan should be developed by the industry working group that spells out initiatives to be taken, the time frame for their initiation and completion, their cost and source of funding, and the organization responsible for conducting each initiative. This process should be repeated annually including an update of all data.



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California
Community
Colleges